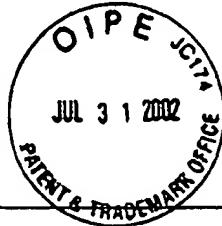
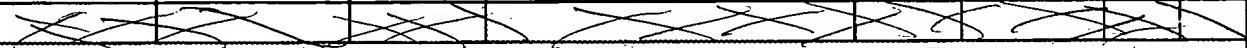
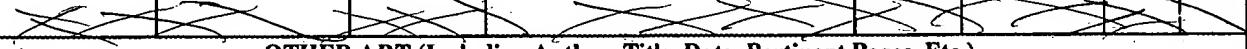
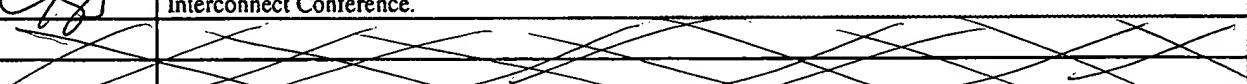
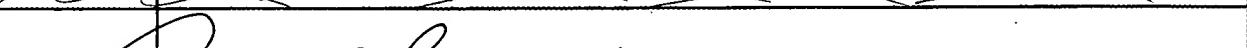
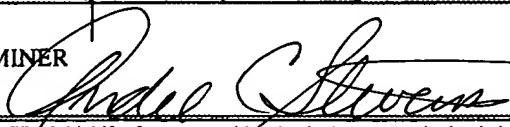


<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>   <b>(PTO-1449)</b>		ATTY. DOCKET NO. 6301/Consilium/DV		SERIAL NO. 09/928,474		
		<b>APPLICANT</b> Badri N. KRISHNAMURTHY et al.				
		<b>FILING DATE</b> August 14, 2001		<b>GROUP</b> 2171		
<b>U.S. PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT APPLICATION NO.	NAME	TITLE	CLASS	SUBCLASS	FILING DATE
	09/927,444	Ward et al.	Dynamic Control of Wafer Processing Paths in Semiconductor Manufacturing Processes			08/13/01
						
						
<b>FOREIGN PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT/ PUBLICATION NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation
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<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>						
	Zhou, Zhen-Hong and Rafael Reif. August 1995. "Epi-Film Thickness Measurements Using Emission Fourier Transform Infrared Spectroscopy—Part II: Real-Time <i>in Situ</i> Process Monitoring and Control." IEEE Transactions on Semiconductor Manufacturing, Vol. 8, No. 3.					
	Telfeyan, Roland, James Moyne, Nauman Chaudhry, James Pugmire, Scott Shellman, Duane Boning, William Moyne, Arnon Hurwitz, and John Taylor. October 1995. "A Multi-Level Approach to the Control of a Chemical-Mechanical Planarization Process." Minneapolis, Minnesota: 42 <sup>nd</sup> National Symposium of the American Vacuum Society.					
	Chang, E., B. Stine, T. Maung, R. Divecha, D. Boning, J. Chung, K. Chang, G. Ray, D. Bradbury, O. S. Nakagawa, S. Oh, and D. Bartelink. December 1995. "Using a Statistical Metrology Framework to Identify Systematic and Random Sources of Die- and Wafer-level ILD Thickness Variation in CMP Processes." Washington, D.C.: International Electron Devices Meeting.					
	Smith, Taber, Duane Boning, James Moyne, Arnon Hurwitz, and John Curry. June 1996. "Compensating for CMP Pad Wear Using Run by Run Feedback Control." Santa Clara, California: VLSI Multilevel Interconnect Conference.					
						
						
EXAMINER 	DATE CONSIDERED 					

EXAMINER! Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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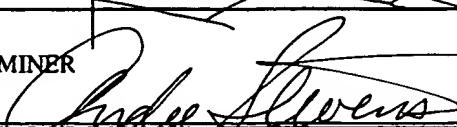
Technology Center 2100

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		FILING DATE August 14, 2001		GROUP 2171			
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<i>AS</i>	5,220,517	06/15/93	Sierk et al.			08/31/90	
	5,329,463	07/12/94	Sierk et al.			01/13/93	
	5,495,417	02/27/96	Fuduka et al.			03/16/93	
	5,497,316	03/05/96	Sierk et al.			04/04/95	
	5,503,707	04/02/96	Maung et al.			09/22/93	
	5,508,947	04/16/96	Sierk et al.			05/13/94	
	5,657,254	08/12/97	Sierk et al.			04/15/96	
	5,694,325	12/02/97	Fukuda et al.			11/22/95	
	5,838,595	11/17/98	Sullivan et al.			11/25/96	
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	2,165,847	08/29/91	Canada			X	
	2,194,855	08/29/91	Canada			X	
	05-151231	06/18/93	Japan			X	
	05-216896	08/27/93	Japan			X	
	05-266029	10/15/93	Japan			X	
	06-110894	04/22/94	Japan			X	
	06-176994	06/24/94	Japan			X	
	06-252236	09/09/94	Japan			X	
	06-260380	09/16/94	Japan			X	
	1072967A3	11/21/01	Europe			X	
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EXAMINER						DATE CONSIDERED <i>02-25-05</i>	

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<b>U.S. PATENT DOCUMENTS</b>							
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<i>BL</i>	6,240,331	05/29/01	Yun		08/18/98		
	6,248,602	06/19/01	Bode et al.		11/01/99		
	6,252,412	06/26/01	Talbot et al.		01/08/99		
	6,263,255	07/17/01	Tan et al.		05/18/98		
	6,292,708	09/18/01	Allen et al.		06/11/98		
	6,298,274	10/02/01	Inoue		09/01/99		
	6,303,395	10/16/01	Nulman		06/01/99		
	6,345,315	02/05/02	Mishra		08/12/98		
	6,366,934	04/02/02	Cheng et al.		06/02/99		
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EXAMINER		DATE CONSIDERED					
<i>Badri N. Krishnamurthy</i>		02-25-05					

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		SEP 8 0 2002					
<b>APPLICANT</b> Badri N. KRISHNAMURTHY et al.		Technology Center 2100					
		FILING DATE August 14, 2001	GROUP 2171				
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME				
	6,175,777	01/16/01	Kim				
	6,178,390	01/23/01	Jun				
	6,185,324	02/06/01	Ishihara et al.				
	6,192,291	02/20/01	Kwon				
	6,197,604	03/06/01	Miller et al.				
	6,211,094	04/03/01	Jun et al.				
	6,226,792	05/01/01	Goiffon et al.				
	6,230,069	05/08/01	Campbell et al.				
	6,236,903	05/22/01	Kim et al.				
	6,240,330	05/29/01	Kurtzberg et al.				
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	11-135601	05/21/99	Japan				X
	WO 00/05759	02/03/00	WO				X
	WO 00/35063	06/15/00	WO				X
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
	July 5, 2001. "Motorola and Advanced Micro Devices Buy ObjectSpace Catalyst Advanced Process Control Product for Five Wafer fabs." Semiconductor FABTECH. <a href="http://www.semiconductorfabtech.com/industry.news/9907/20.07.shtml">www.semiconductorfabtech.com/industry.news/9907/20.07.shtml</a>						
	October 15, 2001. Search Report prepared by the Austrian Patent Office for Singapore Patent Application No. 200004286-1.						
	Johnson, Bob. June 10, 2002. "Advanced Process Control Key to Moore's Law." Gartner, Inc.						
	July 9, 2002. International Search Report prepared by the European Patent Office for PCT/US01/24910.						
	July 29, 2002. International Search Report prepared by the European Patent Office for PCT/US01/27407.						
	Sonderman, Thomas. 2002. "APC as a Competitive Manufacturing Technology: AMD's Vision for 300mm." AEC/APC.						
	<b>EXAMINER</b> 				<b>DATE CONSIDERED</b> <i>02-25-05</i>		

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		Technology Center 2100				
		APPLICANT Badri N. KRISHNAMURTHY et al.				
		FILING DATE August 14, 2001		GROUP 2171		
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<i>AS</i>	5,859,964	01/12/99	Wang et al.			10/25/96
	5,863,807	01/26/99	Jang et al.			03/15/96
	5,870,306	02/09/99	Harada			06/13/97
	5,903,455	05/17/99	Sharpe, Jr. et al.			12/12/96
	5,916,016	06/29/99	Bothra			10/23/97
	5,923,553	07/13/99	Yi			10/05/96
	5,930,138	07/27/99	Lin et al.			09/10/97
	5,940,300	08/17/99	Ozaki			05/08/97
	5,960,214	09/28/99	Sharpe, Jr. et al.			12/04/96
	5,963,881	10/05/99	Kahn et al.			10/20/97
	5,982,920	11/09/99	Tobin, Jr. et al.			01/08/97
	6,041,270	03/21/00	Steffan et al.			12/05/97
	6,078,845	06/20/00	Friedman			11/25/96
	6,112,130	08/29/00	Fukuda et al.			10/01/97
	6,148,246	11/14/00	Kawazome			06/10/98
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<i>AS</i>	0 747 795 A2	12/11/96	Europe			X
<i>AS</i>	10-173029	06/26/98	Japan			X
<i>AS</i>	0 895 145 A1	02/03/99	Europe			X
<i>AS</i>	11-126816	05/11/99	Japan			X
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>						
<i>AS</i>	Schmid, Hans Albrecht. 1995. "Creating the Architecture of a Manufacturing Framework by Design Patterns." Austin, Texas: OOPSLA.					
<i>AS</i>	Baliga, John. July 1999. "Advanced Process Control: Soon to be a Must." Cahners Semiconductor International. <a href="http://www.semiconductor.net/semiconductor/issues/issues/1999/jul99/docs/feature1.asp">www.semiconductor.net/semiconductor/issues/issues/1999/jul99/docs/feature1.asp</a>					
EXAMINER <i>Andrea Slivenski</i>	DATE CONSIDERED <i>02-25-05</i>					

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				<b>RECEIVED</b> <b>SEP 20 2002</b> <b>Technology Center 2100</b>			
		APPLICANT Badri N. KRISHNAMURTHY et al.					
		FILING DATE August 14, 2001		GROUP 2171			
<b>U.S. PATENT DOCUMENTS</b>							
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<i>QCL</i>	4,698,766	10/06/87	Entwistle et al.		05/17/85		
	4,967,381	10/30/90	Lane et al.		07/06/89		
	5,208,765	05/04/93	Turnbull		07/20/90		
	5,226,118	07/06/93	Baker et al.		01/29/91		
	5,231,585	07/27/93	Kobayashi et al.		06/20/90		
	5,420,796	05/30/95	Weling et al.		12/23/93		
	5,469,361	11/21/95	Moyne		06/06/94		
	5,525,808	06/11/96	Irie et al.		12/20/94		
	5,586,039	12/17/96	Hirsch et al.		02/27/95		
	5,603,707	02/18/97	Trombetta et al.		11/28/95		
	5,664,987	09/09/97	Renteln		09/04/96		
	5,812,407	09/22/98	Sato et al.		08/12/97		
	5,828,778	10/27/98	Hagi et al.		06/12/96		
<i>✓</i>	5,832,224	11/03/98	Fehskens et al.		06/14/96		
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<i>QCL</i>	61-171147	08/01/86	Japan				X
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<i>QCL</i>	8-50161	02/20/96	Japan				X
<i>QCL</i>	8-304023	11/22/96	Japan				X
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
<i>QCL</i>	February 1984. "Method and Apparatus of in Situ Measurement and Overlay Error Analysis for Correcting Step and Repeat Lithographic Cameras." <i>IBM Technical Disclosure Bulletin</i> , pp. 4855-4859.						
<i>QCL</i>	October 1984. "Method to Characterize the Stability of a Step and Repeat Lithographic System." <i>IBM Technical Disclosure Bulletin</i> , pp. 2857-2860.						
EXAMINER				DATE CONSIDERED			
<i>Indee Stevens</i>				<i>02-25-05</i>			

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INFORMATION DISCLOSURE  
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APPLICANT  
Badri N. KRISHNAMURTHY et al.

FILING DATE  
August 14, 2001

GROUP  
2171

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Smith, Stewart, Anthony J. Walton, Alan W. S. Ross, Georg K. H. Bodammer, and J. T. M. Stevenson. May 2002. "Evaluation of Sheet Resistance and Electrical Linewidth Measurement Techniques for Copper Damascene Interconnect." <i>IEEE Transactions on Semiconductor Manufacturing</i> , vol. 15, no. 2, pp. 214-222.
Itabashi, Takeyuki, Hiroshi Nakano, and Haruo Akahoshi. June 2002. "Electroless Deposited CoWB for Copper Diffusion Barrier Metal." <i>IEEE International Interconnect Technology Conference</i> , pp. 285-287.
ACM Research, Inc. 2002. "ACM Ultra ECP® System: Electro-Copper Plating (ECP) Deposition." <a href="http://www.acmrc.com/ecp.html">www.acmrc.com/ecp.html</a>
Applied Materials, Inc. 2002. "Applied Materials: Information for Everyone: Copper Electrochemical Plating." <a href="http://www.appliedmaterials.com/products/copper_electrochemical_plating.html">www.appliedmaterials.com/products/copper_electrochemical_plating.html</a> .
KLA-Tencor Corporation. 2002. "KLA Tencor: Press Release: KLA-Tencor Introduces First Production-Worthy Copper CMP In-Situ Film Thickness and End-point Control System: Multi-Million Dollar Order Shipped to Major CMP Tool Manufacturer." <a href="http://www.kla-tencor.com/news_events/press_releases/press_releases2001/984086002.html">www.kla-tencor.com/news_events/press_releases/press_releases2001/984086002.html</a> .
Takahashi, Shingo, Kaori Tai, Hiizu Ohtori, Naoki Komai, Yuji Segawa, Hiroshi Horikoshi, Zenya Yasuda, Hiroshi Yamada, Masao Ishihara, and Takeshi Nogami. 2002. "Fragile Porous Low-k/Copper Integration by Using Electro-Chemical Polishing." <i>2002 Symposium on VLSI Technology Digest of Technical Papers</i> , pp. 32-33.
Cunningham, James A. 2003. "Using Electrochemistry to Improve Copper Interconnects." < <a href="http://www.e-insite.net/semiconductor/index.asp?layout=article&amp;articleid=CA47465">http://www.e-insite.net/semiconductor/index.asp?layout=article&amp;articleid=CA47465</a> >
March 25, 2003. International Search Report for PCT/US02/24859 prepared by the European Patent Office.
Adams, Bret W., Bogdan Swedek, Rajeev Bajaj, Fritz Redeker, Manush Birang, and Gregory Amico. "Full-Wafer Endpoint Detection Improves Process Control in Copper CMP." <i>Semiconductor Fabtech</i> - 12 <sup>th</sup> Edition. Applied Materials, Inc., Santa Clara, CA.
Berman, Mike, Thomas Bibby, and Alan Smith. "Review of In Situ & In-line Detection for CMP Applications." <i>Semiconductor Fabtech</i> , 8 <sup>th</sup> Edition, pp. 267-274.
"Semiconductor Manufacturing: An Overview." < <a href="http://users.ece.gatech.edu/~gmay/overview.html">http://users.ece.gatech.edu/~gmay/overview.html</a> >

EXAMINER

DATE CONSIDERED

02-25-03

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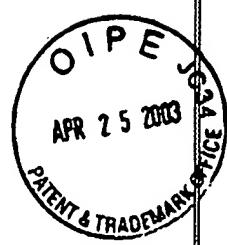
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		APPLICANT Badri N. KRISHNAMURTHY et al.	APR 29 2003 <del>Technology Center 2100</del>																								
		FILING DATE August 14, 2001	GROUP 2171																								
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; vertical-align: top; padding: 5px;">  </td> <td style="width: 90%; vertical-align: top; padding: 5px;"> Khan, S., M. Musavi, and H. Ressom. November 2000. "Critical Dimension Control in Semiconductor Manufacturing (Abstract)." <i>ANNIE 2000. Smart Engineering Systems Design Conference</i>, pp. 995-1000. St. Louis, Missouri. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> ACM Research Inc. 2000. "Advanced Copper Metallization for 0.13 to 0.05 μm &amp; Beyond." <a href="http://acmrc.com/press/ACM-ECP-brochure.pdf">http://acmrc.com/press/ACM-ECP-brochure.pdf</a> </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Ravid, Avi, Avner Sharon, Amit Weingarten, Vladimir Machavariani, and David Scheiner. 2000. "Copper CMP Planarity Control Using ITM." <i>IEEE/SEMI Advanced Semiconductor Manufacturing Conference</i>, pp. 437-443. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Chen, Argon and Ruey-Shan Guo. February 2001. "Age-Based Double EWMA Controller and Its Application to CMP Processes." <i>IEEE Transactions on Semiconductor Manufacturing</i>, vol. 14, no. 1, pp. 11-19. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Tobin, K. W., T. P. Karnowski, L. F. Arrowood, and F. Lakhani. April 2001. "Field Test Results of an Automated Image Retrieval System (Abstract)." <i>Advanced Semiconductor Manufacturing Conference, 2001 IEEE/SEMI</i>, Munich, Germany. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Tan, K. K., H. F. Dou, and K. Z. Tang. May-June 2001. "Precision Motion Control System for Ultra-Precision Semiconductor and Electronic Components Manufacturing (Abstract)." <i>51<sup>st</sup> Electronic Components and Technology Conference 2001. Proceedings</i>, pp. 1372-1379. Orlando, Florida. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Heuberger, U. September 2001. "Coating Thickness Measurement with Dual-Function Eddy-Current &amp; Magnetic Inductance Instrument (Abstract)." <i>Galvanotechnik</i>, vol. 92, no. 9, pp. 2354-2366+IV. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Wang, LiRen and Hefin Rowlands. 2001. "A Novel NN-Fuzzy-SPC Feedback Control System." <i>8<sup>th</sup> IEEE International Conference on Emerging Technologies and Factory Automation</i>, pp. 417-423. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Moyne, J., V. Solakhian, A. Yershov, M. Anderson, and D. Mockler-Hebert. April-May 2002. "Development and Deployment of a Multi-Component Advanced Process Control System for an Epitaxy Tool (Abstract)." <i>2002 IEEE Advanced Semiconductor Manufacturing Conference and Workshop</i>, pp. 125-130. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Sarfaty, M., A. Shanmugasundram, A. Schwarm, J. Paik, Jimin Zhang, Rong Pan, M. J. Seamons, H. Li, R. Hung, and S. Parikh. April-May 2002. "Advance Process Control Solutions for Semiconductor Manufacturing (Abstract)." <i>13<sup>th</sup> Annual IEEE/SEMI Advanced Semiconductor Manufacturing Conference. Advancing the Science and Technology of Semiconductor Manufacturing. ASMC 2002</i>, pp. 101-106. Boston, MA. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Campbell, W. J., S. K. Firth, A. J. Toprac, and T. F. Edgar. May 2002. "A Comparison of Run-to-Run Control Algorithms (Abstract)." <i>Proceedings of 2002 American Control Conference</i>, vol. 3, pp. 2150-2155. </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> Good, Richard and S. Joe Qin. May 2002. "Stability Analysis of Double EWMA Run-to-Run Control with Metrology Delay." <i>IEEE/CPMT International Electronics Manufacturing Technology Symposium</i>, pp. 355-363. </td> </tr> </table>					Khan, S., M. Musavi, and H. Ressom. November 2000. "Critical Dimension Control in Semiconductor Manufacturing (Abstract)." <i>ANNIE 2000. Smart Engineering Systems Design Conference</i> , pp. 995-1000. St. Louis, Missouri.	ACM Research Inc. 2000. "Advanced Copper Metallization for 0.13 to 0.05 μm & Beyond." <a href="http://acmrc.com/press/ACM-ECP-brochure.pdf">http://acmrc.com/press/ACM-ECP-brochure.pdf</a>		Ravid, Avi, Avner Sharon, Amit Weingarten, Vladimir Machavariani, and David Scheiner. 2000. "Copper CMP Planarity Control Using ITM." <i>IEEE/SEMI Advanced Semiconductor Manufacturing Conference</i> , pp. 437-443.		Chen, Argon and Ruey-Shan Guo. February 2001. "Age-Based Double EWMA Controller and Its Application to CMP Processes." <i>IEEE Transactions on Semiconductor Manufacturing</i> , vol. 14, no. 1, pp. 11-19.		Tobin, K. W., T. P. Karnowski, L. F. Arrowood, and F. Lakhani. April 2001. "Field Test Results of an Automated Image Retrieval System (Abstract)." <i>Advanced Semiconductor Manufacturing Conference, 2001 IEEE/SEMI</i> , Munich, Germany.		Tan, K. K., H. F. Dou, and K. Z. Tang. May-June 2001. "Precision Motion Control System for Ultra-Precision Semiconductor and Electronic Components Manufacturing (Abstract)." <i>51<sup>st</sup> Electronic Components and Technology Conference 2001. Proceedings</i> , pp. 1372-1379. Orlando, Florida.		Heuberger, U. September 2001. "Coating Thickness Measurement with Dual-Function Eddy-Current & Magnetic Inductance Instrument (Abstract)." <i>Galvanotechnik</i> , vol. 92, no. 9, pp. 2354-2366+IV.		Wang, LiRen and Hefin Rowlands. 2001. "A Novel NN-Fuzzy-SPC Feedback Control System." <i>8<sup>th</sup> IEEE International Conference on Emerging Technologies and Factory Automation</i> , pp. 417-423.		Moyne, J., V. Solakhian, A. Yershov, M. Anderson, and D. Mockler-Hebert. April-May 2002. "Development and Deployment of a Multi-Component Advanced Process Control System for an Epitaxy Tool (Abstract)." <i>2002 IEEE Advanced Semiconductor Manufacturing Conference and Workshop</i> , pp. 125-130.		Sarfaty, M., A. Shanmugasundram, A. Schwarm, J. Paik, Jimin Zhang, Rong Pan, M. J. Seamons, H. Li, R. Hung, and S. Parikh. April-May 2002. "Advance Process Control Solutions for Semiconductor Manufacturing (Abstract)." <i>13<sup>th</sup> Annual IEEE/SEMI Advanced Semiconductor Manufacturing Conference. Advancing the Science and Technology of Semiconductor Manufacturing. ASMC 2002</i> , pp. 101-106. Boston, MA.		Campbell, W. J., S. K. Firth, A. J. Toprac, and T. F. Edgar. May 2002. "A Comparison of Run-to-Run Control Algorithms (Abstract)." <i>Proceedings of 2002 American Control Conference</i> , vol. 3, pp. 2150-2155.		Good, Richard and S. Joe Qin. May 2002. 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ACM Research Inc. 2000. "Advanced Copper Metallization for 0.13 to 0.05 μm & Beyond." <a href="http://acmrc.com/press/ACM-ECP-brochure.pdf">http://acmrc.com/press/ACM-ECP-brochure.pdf</a>																											
Ravid, Avi, Avner Sharon, Amit Weingarten, Vladimir Machavariani, and David Scheiner. 2000. "Copper CMP Planarity Control Using ITM." <i>IEEE/SEMI Advanced Semiconductor Manufacturing Conference</i> , pp. 437-443.																											
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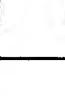
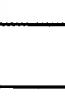
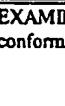
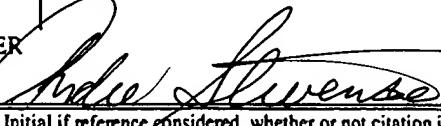
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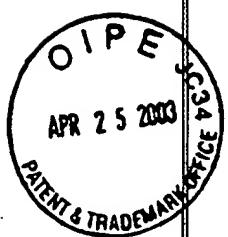
<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)</b>		ATTY. DOCKET NO. 006301 USA/Consilium/Consilium	SERIAL NO. 09/028,474
		APPLICANT Badri N. KRISHNAMURTHY et al.	<b>RECEIVED</b> APR 29 2003 Technology Center 2100
		FILING DATE August 14, 2001	GROUP 2171
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
<p>Ouma, Dennis, Duane Boning, James Chung, Greg Shinn, Leif Olsen, and John Clark. 1998. "An Integrated Characterization and Modeling Methodology for CMP Dielectric Planarization." <i>Proceedings of the IEEE 1998 International Interconnect Technology Conference</i>, pp. 67-69.</p>			
<p>Boning, Duane S., Jerry Stefani, and Stephanie W. Butler. February 1999. "Statistical Methods for Semiconductor Manufacturing." <i>Encyclopedia of Electrical Engineering</i>, J. G. Webster, Ed.</p>			
<p>McIntosh, John. March 1999. "Using CD-SEM Metrology in the Manufacture of Semiconductors (Abstract)." <i>JOM</i>, vol. 51, no. 3, pp. 38-39.</p>			
<p>Pan, J. Tony, Ping Li, Kapila Wijekoon, Stan Tsai, and Fritz Redeker. May 1999. "Copper CMP Integration and Time Dependent Pattern Effect." <i>IEEE 1999 International Interconnect Technology Conference</i>, pp. 164-166.</p>			
<p>Meckl, P. H. and K. Umemoto. August 1999. "Achieving Fast Motions in Semiconductor Manufacturing Machinery (Abstract)." <i>Proceedings of the 1999 IEEE International Conference on Control Applications</i>, vol. 1, pp. 725-729. Kohala Coast, HI.</p>			
<p>Khan, K., C. El Chemali, J. Moyne, J. Chapple-Sokol, R. Nadeau, P. Smith, C., and T. Parikh. October 1999. "Yield Improvement at the Contact Process Through Run-to-Run Control (Abstract)." <i>24<sup>th</sup> IEEE/CPMT Electronics Manufacturing Technology Symposium</i>, pp. 258-263.</p>			
<p>Ruegsegger, Steven, Aaron Wagner, James S. Freudenberg, and Dennis S. Grimard. November 1999. "Feedforward Control for Reduced Run-to-Run Variation in Microelectronics Manufacturing." <i>IEEE Transactions on Semiconductor Manufacturing</i>, vol. 12, no. 4.</p>			
<p>November 1999. "How to Use EWMA to Achieve SPC and EPC Control." <i>International Symposium on NDT Contribution to the Infrastructure Safety Systems</i>, Tores, Brazil.  <a href="http://www.ndt.net/abstract/ndtiss99/data/35.htm">http://www.ndt.net/abstract/ndtiss99/data/35.htm</a></p>			
<p>Edgar, T. F., W. J. Campbell, and C. Bode. December 1999. "Model-Based Control in Microelectronics Manufacturing." <i>Proceedings of the 38<sup>th</sup> IEEE Conference on Decision and Control</i>, Phoenix, Arizona, vol. 4, pp. 4185-4191.</p>			
<p>Meckl, P. H. and K. Umemoto. April 2000. "Achieving Fast Motions by Using Shaped Reference Inputs [Semiconductor Manufacturing Machine] (Abstract)." <i>NEC Research and Development</i>, vol. 41, no. 2, pp. 232-237.</p>			
<p>Oechsner, R., T. Tschaftary, S. Sommer, L. Pfitzner, H. Ryssel, H. Gerath, C. Baier, and M. Hafner. September 2000. "Feed-forward Control for a Lithography/Etch Sequence (Abstract)." <i>Proceedings of the SPIE - The International Society for Optical Engineering Conference</i>, vol. 4182, pp. 31-39.</p>			
<p>Cheung, Robin. October 18, 2000. "Copper Interconnect Technology." <i>AVS/CMP User Group Meeting</i>, Santa Clara, CA.</p>			
<p>Edgar, Thomas F., Stephanie W. Butler, W. Jarrett Campbell, Carlos Pfeiffer, Christopher Bode, Sung Bo Hwang, K. S. Balakrishnan, and J. Hahn. November 2000. "Automatic Control in Microelectronics Manufacturing: Practices, Challenges, and Possibilities (Abstract)." <i>Automatica</i>, v. 36, n. 11.</p>			
EXAMINER <i>Andrea Brown</i>	DATE CONSIDERED <i>07-25-05</i>		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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		APPLICANT Badri N. KRISHNAMURTHY et al.	
		FILING DATE August 14, 2001	GROUP 2171
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
<p></p> <p>Boning, Duane S., William P. Moyne, Taber H. Smith, James Moyne, Ronald Telfeyan, Arnon Hurwitz, Scott Shellman, and John Taylor. October 1996. "Run by Run Control of Chemical-Mechanical Polishing." <i>IEEE Transactions on Components, Packaging, and Manufacturing Technology—Part C</i>, vol. 19, no. 4, pp. 307-314.</p>			
<p></p> <p>Zhe, Ning, J. R. Moyne, T. Smith, D. Boning, E. Del Castillo, Yeh Jinn-Yi, and Hurwitz. November 1996. "A Comparative Analysis of Run-to-Run Control Algorithms in Semiconductor Manufacturing Industry (Abstract)." <i>IEEE/SEMI 1996 Advanced Semiconductor Manufacturing Conference Workshop</i>, pp. 375-381.</p>			
<p></p> <p>Yasuda, M., T. Osaka, and M. Ikeda. December 1996. "Feedforward Control of a Vibration Isolation System for Disturbance Suppression (Abstract)." <i>Proceeding of the 35<sup>th</sup> IEEE Conference on Decision and Control</i>, vol. 2, pp. 1229-1233. Kobe, Japan.</p>			
<p></p> <p>Fan, Jr-Min, Ruey-Shan Guo, Shi-Chung Chang, and Kian-Huei Lee. 1996. "Abnormal Trend Detection of Sequence-Disordered Data Using EWMA Method." <i>IEEE/SEMI Advanced Semiconductor Manufacturing Conference</i>, pp. 169-174.</p>			
<p></p> <p>Smith, Taber and Duane Boning. 1996. "A Self-Tuning EWMA Controller Utilizing Artificial Neural Network Function Approximation Techniques." <i>IEEE/CPMT International Electronics Manufacturing Technology Symposium</i>, pp. 355-363.</p>			
<p></p> <p>Guo, Ruey-Shan, Li-Shia Huang, Argon Chen, and Jin-Jung Chen. October 1997. "A Cost-Effective Methodology for a Run-by-Run EWMA Controller." <i>6<sup>th</sup> International Symposium on Semiconductor Manufacturing</i>, pp. 61-64.</p>			
<p></p> <p>Mullins, J. A., W. J. Campbell, and A. D. Stock. October 1997. "An Evaluation of Model Predictive Control in Run-to-Run Processing in Semiconductor Manufacturing (Abstract)." <i>Proceedings of the SPIE - The International Society for Optical Engineering Conference</i>, vol. 3213, pp. 182-189.</p>			
<p></p> <p>Reitman, E. A., D. J. Friedman, and E. R. Lory. November 1997. "Pre-Production Results Demonstrating Multiple-System Models for Yield Analysis (Abstract)." <i>IEEE Transactions on Semiconductor Manufacturing</i>, vol. 10, no. 4, pp. 469-481.</p>			
<p></p> <p>Durham, Jim and Myriam Roussel. 1997. "A Statistical Method for Correlating In-Line Defectivity to Probe Yield." <i>IEEE/SEMI Advanced Semiconductor Manufacturing Conference</i>, pp. 76-77.</p>			
<p></p> <p>Shindo, Wataru, Eric H. Wang, Ram Akella, and Andrzej J. Strojwas. 1997. "Excursion Detection and Source Isolation in Defect Inspection and Classification." <i>2<sup>nd</sup> International Workshop on Statistical Metrology</i>, pp. 90-93.</p>			
<p></p> <p>July 1998. "Active Controller: Utilizing Active Databases for Implementing Multistep Control of Semiconductor Manufacturing (Abstract)." <i>IEEE Transactions on Components, Packaging and Manufacturing Technology—Part C</i>, vol. 21, no. 3, pp. 217-224.</p>			
<p></p> <p>Fang, S. J., A. Barda, T. Janecko, W. Little, D. Outley, G. Hempel, S. Joshi, B. Morrison, G. B. Shinn, and M. Birang. 1998. "Control of Dielectric Chemical Mechanical Polishing (CMP) Using and Interferometry Based Endpoint Sensor." <i>International Proceedings of the IEEE Interconnect Technology Conference</i>, pp. 76-78.</p>			
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	May 1992. "Laser Ablation Endpoint Detector." <i>IBM Technical Disclosure Bulletin</i> , pp. 333-334.
<i>CC</i>	Spanos, Costas J., Hai-Fang Guo, Alan Miller, and Joanne Levine-Parrill. November 1992. "Real-Time Statistical Process Control Using Tool Data." <i>IEEE Transactions on Semiconductor Manufacturing</i> , v. 5, n. 4, pp. 308-318.
	February 1993. "Electroless Plating Scheme to Hermetically Seal-Copper Features." <i>IBM Technical Disclosure Bulletin</i> , pp. 405-406.
	Scarr, J. M. and J. K. Zelisse. April 1993. "New Topology for Thickness Monitoring Eddy Current Sensors (Abstract)." <i>Proceedings of the 36<sup>th</sup> Annual Technical Conference</i> , Dallas, Texas.
	Matsuyama, Akira and Jessi Niou. 1993. "A State-of-the-Art Automation System of an ASIC Wafer Fab in Japan." <i>IEEE/SEMI International Semiconductor Manufacturing Science Symposium</i> , pp. 42-47.
	Yeh, C. Eugene, John C. Cheng, and Kwan Wong. 1993. "Implementation Challenges of a Feedback Control System for Wafer Fabrication." <i>IEEE/CHMT International Electronics Manufacturing Technology Symposium</i> , pp. 438-442.
	Kurtzberg, Jerome M. and Menachem Levanoni. January 1994. "ABC: A Better Control for Manufacturing." <i>IBM Journal of Research and Development</i> , v. 38, n. 1, pp. 11-30.
	Mozumder, Purnendu K. and Gabriel G. Barna. February 1994. "Statistical Feedback Control of a Plasma Etch Process." <i>IEEE Transactions on Semiconductor Manufacturing</i> , v. 7, n. 1, pp. 1-11.
	Muller-Heinzerling, Thomas, Ulrich Neu, Hans Georg Nurnberg, and Wolfgang May. March 1994. "Recipe-Controlled Operation of Batch Processes with Batch X." <i>ATP Automatisierungstechnische Praxis</i> , vol. 36, no. 3, pp. 43-51.
	Stoddard, K., P. Crouch, M. Kozicki, and K. Tsakalis. June-July 1994. "Application of Feedforward and Adaptive Feedback Control to Semiconductor Device Manufacturing (Abstract)." <i>Proceedings of 1994 American Control Conference - ACC '94</i> , vol. 1, pp. 892-896. Baltimore, Maryland.
	Schaper, C. D., M. M. Moslehi, K. C. Saraswat, and T. Kailath. November 1994. "Modeling, Identification, and Control of Rapid Thermal Processing Systems (Abstract)." <i>Journal of the Electrochemical Society</i> , vol. 141, no. 11, pp. 3200-3209.
	Tao, K. M., R. L. Kosut, M. Ekblad, and G. Aral. December 1994. "Feedforward Learning Applied to RTP of Semiconductor Wafers (Abstract)." <i>Proceedings of the 33<sup>rd</sup> IEEE Conference on Decision and Control</i> , vol. 1, pp. 67-72. Lake Buena Vista, Florida.
	Hu, Albert, He Du, Steve Wong, Peter Renteln, and Emmanuel Sachs. 1994. "Application of Run by Run Controller to the Chemical-Mechanical Planarization Process." <i>IEEE/CPMT International Electronics Manufacturing Technology Symposium</i> , pp. 371-378.
	Spanos, C. J., S. Leang, S.-Y. Ma, J. Thomson, B. Bombay, and X. Niu. May 1995. "A Multistep Supervisory Controller for Photolithographic Operations (Abstract)." <i>Proceedings of the Symposium on Process Control, Diagnostics, and Modeling in Semiconductor Manufacturing</i> , pp. 3-17.
<i>↓</i>	Leang, Sovarong, Shang-Yi Ma, John Thomson, Bart John Bombay, and Costas J. Spanos. May 1996. "A Control System for Photolithographic Sequences." <i>IEEE Transactions on Semiconductor Manufacturing</i> , vol. 9, no. 2.

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No
<i>CRS</i>	1 071 128	01/24/01	Europe			X	
	WO 01/18623	03/15/01	WIPO			X	
	WO 01/25865	04/12/01	WIPO			X	
	434103	05/16/01	Taiwan			X	
	436383	05/28/01	Taiwan			X	
	455938	09/21/01	Taiwan			X	
	455976	09/21/01	Taiwan			X	
	2001-284299	10/12/01	Japan			X	
	2001-305108	10/31/01	Japan			X	
	2002-9030	01/11/02	Japan			X	
	WO 02/074491	09/26/02	WIPO			X	
<i>WV</i>	2002-343754	11/29/02	Japan			X	
<i>X</i>	<del>XXXX</del>						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>CRS</i>	Ostanin, Yu.Ya. October 1981. "Optimization of Thickness Inspection of Electrically Conductive Single-Layer Coatings with Laid-on Eddy-Current Transducers (Abstract)." <i>Defektoskopiya</i> , vol. 17, no. 10, pp. 45-52. Moscow, USSR.
	February 1984. "Substrate Screening Process." <i>IBM Technical Disclosure Bulletin</i> , pp. 4824-4825.
	Herrmann, D. 1988. "Temperature Errors and Ways of Elimination for Contactless Measurement of Shaft Vibrations (Abstract)." <i>Technisches Messen</i> ™, vol. 55, no. 1, pp. 27-30. West Germany.
	Lin, Kuang-Kuo and Costas J. Spanos. November 1990. "Statistical Equipment Modeling for VLSI Manufacturing: An Application for LPCVD." <i>IEEE Transactions on Semiconductor Manufacturing</i> , v. 3, n. 4, pp. 216-229.
	Chang, Norman H. and Costas J. Spanos. February 1991. "Continuous Equipment Diagnosis Using Evidence Integration: An LPCVD Application." <i>IEEE Transactions on Semiconductor Manufacturing</i> , v. 4, n. 1, pp. 43-51.
	Larrabee, G. B. May 1991. "The Intelligent Microelectronics Factory of the Future (Abstract)." <i>IEEE/SEMI International Semiconductor Manufacturing Science Symposium</i> , pp. 30-34. Burlingame, CA.
<i>WV</i>	Burke, Peter A. June 1991. "Semi-Empirical Modelling of SiO <sub>2</sub> Chemical-Mechanical Polishing Planarization." <i>VMIC Conference, 1991 IEEE</i> , pp. 379-384. IEEE.

EXAMINER

DATE CONSIDERED

02-25-05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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## U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<i>AS</i>	2002/0149359	10/17/02	Crouzen et al.			08/18/01
	6,479,902	11/12/02	Lopatin et al.			06/29/00
	6,479,990	11/12/02	Mednikov et al.			06/18/01
	2002/0185658	12/12/02	Inoue et al.			06/14/01
	2002/0193902	12/19/02	Shamugasundram et al.			06/18/02
	2002/0197745	12/26/02	Shamugasundram et al.			08/31/01
	2002/0197934	12/26/02	Paik			11/30/01
	2002/0199082	12/26/02	Shamugasundram et al.			06/18/02
	6,503,839	01/07/03	Gonzales et al.			07/03/01
	2003/0020909	01/30/03	Adams et al.			04/09/01
	2003/0020928	01/30/03	Ritzdorf et al.			07/09/01
<i>AS</i>	6,517,413	02/11/03	Hu et al.			10/25/00

## FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No
<i>AS</i>	61-66104	04/04/86	Japan			X	
	3-202710	09/04/91	Japan			X	
	8-23166	01/23/96	Japan			X	
	9-246547	09/19/97	Japan			X	
	WO 98/05066	02/05/98	WIPO			X	
	10-34522	02/10/98	Japan			X	
	0 869 652	10/07/98	Europe			X	
	WO 99/09371	02/25/99	WIPO			X	
	0 910 123	04/21/99	Europe			X	
	0 932 194	07/28/99	Europe			X	
	WO 00/00874	01/06/00	WIPO			X	
<i>AS</i>	2000-183001	06/30/00	Japan			X	

EXAMINER

DATE CONSIDERED

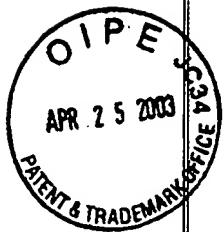
02-25-05

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)			ATTY. DOCKET NO. 006301 USA/Consilium/Consilium	SERIAL NO. 09/928,474			
			RECEIVED APR 29 2003 Technology Center 2100				
			APPLICANT Badri N. KRISHNAMURTHY et al.				
			FILING DATE August 14, 2001	GROUP 2171			
U.S. PATENT DOCUMENTS							
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE	
	2001/0042690	11/22/01	Talieh			12/14/00	
	6,324,481	11/27/01	Atchison et al.			06/15/99	
	6,334,807	01/01/02	Lebel et al.			04/30/99	
	6,336,841	01/08/02	Chang			03/29/01	
	2002/0032499	03/14/02	Wilson et al.			05/04/01	
	6,360,133	03/19/02	Campbell et al.			06/17/99	
	6,360,184	03/19/02	Jacquez			03/26/97	
	6,368,883	04/09/02	Bode et al.			08/10/99	
	6,368,884	04/09/02	Goodwin et al.			04/13/00	
	6,379,980	04/30/02	Toprac			07/26/00	
	6,388,253	05/14/02	Su			11/02/00	
	2002/0058460	05/16/02	Lee et al.			09/14/01	
	6,395,152	05/28/02	Wang			07/02/99	
	6,397,114	05/28/02	Eryurek et al.			05/03/99	
	6,405,096	06/11/02	Toprac et al.			08/10/99	
	6,405,144	06/11/02	Toprac et al.			01/18/00	
	2002/0070126	06/13/02	Sato et al.			09/19/01	
	2002/0081951	06/27/02	Boyd et al.			02/20/02	
	2002/0089676	07/11/02	Pecen et al.			04/26/00	
	2002/0102853	08/01/02	Li et al.			12/20/01	
	2002/0107599	08/08/02	Patel et al.			01/25/01	
	6,435,952	08/20/02	Boyd et al.			06/30/00	
	6,438,438	08/20/02	Takagi et al.			01/02/98	
	2002/0113039	08/22/02	Mok et al.			02/16/01	
	6,440,295	08/27/02	Wang			02/04/00	
	2002/0127950	09/12/02	Hirose et al.			03/08/01	
	✓	6,455,937	09/24/02	Cunningham			03/17/99
	EXAMINER	DATE CONSIDERED					
					02-25-05		

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)			ATTY. DOCKET NO. 006301 USA/Consilium/Consilium	SERIAL NO. 09/928,474		
			RECEIVED APR 29 2003			
			APPLICANT Badri N. KRISHNAMURTHY et al.	Technology Center 2100		
			FILING DATE August 14, 2001	GROUP 2171		
U.S. PATENT DOCUMENTS						
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	6,159,075	12/12/00	Zhang			10/13/99
	6,159,644	12/12/00	Satoh et al.			03/06/96
	6,161,054	12/12/00	Rosenthal et al.			09/17/98
	6,169,931	01/02/01	Runnels			06/29/98
	6,172,756	01/09/01	Chalmers et al.			12/11/98
	6,173,240	01/09/01	Sepulveda et al.			11/02/98
	6,191,864	02/20/01	Sandhu			02/29/00
	6,204,165	03/20/01	Ghoshal			06/24/99
	6,210,983	04/03/01	Atchison et al.			06/15/99
	6,214,734	04/10/01	Bothra et al.			11/20/98
	6,217,412	04/17/01	Campbell et al.			08/11/99
	6,222,936	04/24/01	Phan et al.			09/13/99
	2001/0001755	05/24/01	Sandhu et al.			12/29/00
	2001/0003084	06/07/01	Finarov			12/04/00
	6,246,972	06/12/01	Klimasauskas			05/27/99
	6,276,989	08/21/01	Campbell et al.			08/11/99
	6,280,289	08/28/01	Wiswesser et al.			11/02/98
	6,284,622	09/04/01	Campbell et al.			10/25/99
	6,287,879	09/11/01	Gonzales et al.			08/11/99
	6,290,572	09/18/01	Hofmann			03/23/00
6,304,999	10/16/01	Toprac et al.			10/23/00	
2001/0030366	10/18/01	Nakano et al.			03/07/01	
6,307,628	10/23/01	Lu et al.			08/18/00	
6,314,379	11/06/01	Hu et al.			12/04/97	
2001/0039462	11/08/01	Mendez et al.			04/02/01	
6,320,655	11/20/01	Matsushita et al.			03/15/00	
EXAMINER				DATE CONSIDERED	02-28-05	

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INFORMATION DISCLOSURE  
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ATTY. DOCKET NO.  
006301  
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09/928,474

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Technology Center 2100

APPLICANT  
Badri N. KRISHNAMURTHY et al.

FILING DATE  
August 14, 2001

GROUP  
2171

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	5,667,424	09/16/97	Pan			09/25/96
	5,674,787	10/07/97	Zhao et al.			01/16/96
	5,719,796	02/17/98	Chen			12/04/95
	5,735,055	04/07/98	Hochbein et al.			04/23/96
	5,761,064	06/02/98	La et al.			10/06/95
	5,777,901	07/07/98	Berezin et al.			09/29/95
	5,787,021	07/28/98	Sarnaha			12/18/95
	5,787,269	07/28/98	Hyodo			09/19/95
	5,825,913	10/20/98	Rostami et al.			07/18/95
	5,857,258	01/12/99	Penzes et al.			05/12/94
	5,910,846	06/08/99	Sandhu			08/19/97
	5,943,237	08/24/99	Van Boxem			10/17/97
	5,960,185	09/28/99	Nguyen			06/24/96
	5,961,369	10/05/99	Bartels et al.			06/04/98
	5,978,751	11/02/99	Pence et al.			02/25/97
	6,017,771	01/25/00	Yang et al.			04/27/98
	6,036,349	03/14/00	Gombar			07/26/96
	6,064,759	05/16/00	Buckley et al.			11/06/97
	6,072,313	06/06/00	Li et al.			06/17/97
	6,097,887	08/01/00	Hardikar et al.			10/27/97
	6,108,092	08/22/00	Sandhu			06/08/99
	6,127,263	10/03/00	Parikh			07/10/98
	6,136,163	10/24/00	Cheung et al.			03/05/99
	6,141,660	10/31/00	Bach et al.			07/16/98
	6,143,646	11/07/00	Wetzel			06/03/97
	6,148,099	11/14/00	Lee et al.			07/03/97
✓	6,148,239	11/14/00	Funk et al.			12/12/97

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INFORMATION DISCLOSURE  
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09/028,424

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APPLICANT  
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August 14, 2001

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2171

## U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	3,205,485	09/07/65	Noltingk			10/21/60
	3,229,198	01/11/66	Libby			09/28/62
	4,000,458	12/28/76	Miller et al.			08/21/75
	4,302,721	11/24/81	Urbanek et al.			05/15/79
	4,750,141	06/07/88	Judell et al.			11/26/85
	4,757,259	07/12/88	Charpentier			11/05/86
	4,938,600	07/03/90	Into			02/09/89
	5,283,141	02/01/94	Yoon et al.			03/05/92
	5,338,630	08/16/94	Yoon et al.			11/18/93
	5,485,082	01/16/96	Wisspeintner et al.			04/05/90
	5,497,381	03/05/96	O'Donoghue et al.			06/01/95
	5,511,005	04/23/96	Abbe et al.			02/16/94
	5,519,605	05/21/96	Cawfield			10/24/94
	5,526,293	06/11/96	Mozumder et al.			12/17/93
	5,541,510	06/30/96	Danielson			04/06/95
	5,546,312	08/13/96	Mozumder et al.			02/24/94
	5,553,195	09/03/96	Meijer			09/29/94
	5,602,492	02/11/97	Cresswell et al.			04/28/94
	5,617,023	04/01/97	Skalski			02/02/95
	5,627,083	05/06/97	Tounai			05/12/95
	5,642,296	06/24/97	Saxena			07/29/93
	5,646,870	07/08/97	Krivokapic et al.			02/13/95
	5,649,169	07/15/97	Berezin et al.			06/20/95
	5,654,903	08/05/97	Reitman et al.			11/07/95
	5,663,797	09/02/97	Sandhu			05/16/96
	5,665,199	09/09/97	Sahota et al.			06/23/95
✓	5,666,297	09/09/97	Britt et al.			05/13/94

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<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> (PTO-1449)		ATTY. DOCKET NO. 006301 USA/Consilium/Consilium/ DK	SERIAL NO. 09/928,474			
		APPLICANT Badri N. KRISHNAMURTHY et al.				
		FILING DATE August 14, 2001	GROUP 2812			
<b>U.S. PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<i>CS</i>	3,767,900	10/23/73	Chao et al.			06/23/71
	3,920,965	11/18/75	Sohrwardy			03/04/74
	4,368,510	01/11/83	Anderson			10/20/80
	4,616,308	10/07/86	Morshed et al.			12/02/85
	4,663,703	05/05/87	Axelby et al.			10/02/85
	5,347,446	09/13/94	Iino et al.			02/10/92
	5,519,605	05/21/96	Cawfield			10/24/94
	6,128,016	10/03/00	Coelho et al.			12/20/96
	6,219,711	04/17/01	Chari			10/01/97
	6,249,712	06/19/01	Boiquaye			09/25/96
	6,278,899	08/21/01	Piche et al.			10/06/98
	2001/0039462	11/08/01	Mendez et al.			04/02/01
	2001/0040997	11/15/01	Tsap et al.			05/15/01
	2002/0128805	09/12/02	Goldman et al.			12/26/00
<b>FOREIGN PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation
						Yes
<i>CS</i>	EP 1 067 757	01/10/01	Europe			X
<i>CS</i>	WO 01/33277	05/10/01	WO			X
<i>CS</i>	WO 02/31613 A2	04/18/02	WO			X
<i>CS</i>	WO 02/31613 A3	04/18/02	WO			X
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>						
Levine, Martin D. 1985. <i>Vision in Man and Machine</i> . New York: McGraw-Hill, Inc. pp. ix-xii, 1-58.						
Pilu, Maurizio. September 2001. "Undoing Page Curl Distortion Using Applicable Surfaces." <i>IEEE International Conference on Image Processing</i> . Thessalonica, Greece.						
23 May 2003. Written Opinion for PCT/US01/24910.						
EXAMINER <i>CS</i>	DATE CONSIDERED <i>02-28-05</i>			TECHNOLOGY CENTER 2800 RECEIVED JUL 8 2003 2003		

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SHEET 1 OF 1

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)</b>		ATTY. DOCKET NO. 006301	SERIAL NO. 09/928,474			
		USA/Consilium/Consilium/ DK	RECEIVED OCT 17 2003 U.S. TRADEMARK OFFICE 2900 MALL RD.			
		APPLICANT Badri N. KRISHNAMURTHY et al.				
		FILING DATE August 14, 2001	GROUP 2812			
<b>U.S. PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<i>CG</i>	5,901,313	05/04/99	Wolf et al.			09/02/97
	6,002,989	12/14/99	Shiba et al.			04/01/97
	6,094,688	07/25/00	Mellen-Garnett et al.			03/12/98
	6,340,602	01/22/02	Johnson et al.			02/12/01
	6,345,288	02/05/02	Reed et al.			05/15/00
	6,368,879	04/09/02	Toprac			09/22/99
	US-2002/0107604 ✓	08/08/02	Riley et al.			12/06/00
	6,470,230	10/22/02	Toprac et al.			01/04/00
	6,482,660	11/19/02	Conchieri et al.			03/19/01
	6,567,717	05/20/03	Krivokapic et al.			01/19/00
<b>FOREIGN PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation
						Yes
<i>CG</i>	WO 99/59200 ✓	11/18/99	WIPO			X
<i>CG</i>	WO 01/52319 ✓	07/19/01	WIPO			X
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>						
<i>CG</i>	Williams, Randy, Dadi Gudmundsson, Kevin Monahan, Raman Nurani, Meryl Stoller and J. George Shanthikumar. October 1999. "Optimized Sample Planning for Wafer Defect Inspection," <i>Semiconductor Manufacturing Conference Proceedings, 1999 IEEE International Symposium on Santa Clara, CA</i> . Piscataway, NJ. pp. 43 - 46.					
<i>CG</i>	23 July 2003. Invitation to Pay Additional Fees and Communication Relating to the Results of the Partial International Search for PCT/US02/19116.					
<i>CG</i>	01 August 2003. Written Opinion for PCT/US01/27406.					
<i>CG</i>	20 August 2003. Written Opinion for PCT/US01/22833.					
EXAMINER <i>Indee C. Stewart</i>	DATE CONSIDERED <i>02-25-05</i>					

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SHEET 2 OF 2

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)</b>			ATTY. DOCKET NO. 006301 USA/Consilium/Consilium/ DK		SERIAL NO. 09/928,474	
			APPLICANT Badri N. KRISHNAMURTHY et al.			
			FILING DATE August 14, 2001		GROUP 2812	
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>						
<p><i>[Signature]</i></p> <p>El Chemali, Chadi et al. July/August 2000. "Multizone uniformity control of a chemical mechanical polishing process utilizing a pre- and postmeasurement strategy." <i>J. Vac. Sci. Technol.</i> Volume 18, No. 4. pp. 1287 - 1296.</p>						
<p>March 5, 2001. "KLA-Tencor Introduces First Production-worthy Copper CMP In-situ Film Thickness and End-point Control System." <a href="http://www.kla-tencor.com/j/servlet/NewsItem?newsItemID=74">http://www.kla-tencor.com/j/servlet/NewsItem?newsItemID=74</a>.</p>						
<p>2002. "Microsense II - 5810: Non-Contact Capacitance Gaging Module." <a href="http://www.adetech.com">www.adetech.com</a>.</p>						
<p>08 August 2003. PCT International Search Report from PCT/US03/08513.</p>						
<p>14 October 2003. PCT International Search Report from PCT/US02/21942.</p>						
<p>20 October 2003. PCT International Search Report from PCT/US02/19116.</p>						
<p>23 October 2003. PCT International Preliminary Examination Report from PCT/US01/24910.</p>						
<p>"NanoMapper wafer nanotopography measurement by ADE Phase Shift." <a href="http://www.phase-shift.com/nanomap.shtml">http://www.phase-shift.com/nanomap.shtml</a>.</p>						
<p>"Wafer flatness measurement of advanced wafers." <a href="http://www.phase-shift.com/wafer-flatness.shtml">http://www.phase-shift.com/wafer-flatness.shtml</a>.</p>						
<p>"ADE Technologies, Inc. - 6360." <a href="http://www.adetech.com/6360.shtml">http://www.adetech.com/6360.shtml</a>.</p>						
<p>"3D optical profilometer MicroXAM by ADE Phase Shift." <a href="http://www.phase-shift.com/microxam.shtml">http://www.phase-shift.com/microxam.shtml</a>.</p>						
<p>↓ "NanoMapper FA factory automation wafer nanotopography measurement." <a href="http://www.phase-shift.com/nanomapperfa.shtml">http://www.phase-shift.com/nanomapperfa.shtml</a>.</p>						
EXAMINER <i>[Signature]</i>			DATE CONSIDERED <i>02-25-05</i>			

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SHEET 1 OF 2

INFORMATION DISCLOSURE  
CITATION IN AN  
APPLICATION  
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ATTY. DOCKET NO.  
006301  
USA/Consilium/Consilium/  
DK

SERIAL NO.  
09/928,474

APPLICANT  
Badri N. KRISHNAMURTHY et al.

FILING DATE  
August 14, 2001

GROUP  
2812

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<i>CKJ</i>	4,207,520	06/10/80	Flora et al.			04/06/78
	4,209,744	06/24/80	Gerasimov et al.			03/27/78
	4,609,870	09/02/86	Lale et al.			09/13/84
	4,755,753	07/05/88	Chern			07/23/86
	5,427,878	06/27/95	Corliss			05/16/94
	5,534,289	07/09/96	Bilder et al.			01/03/95
	5,867,389	02/02/99	Hamada et al.			11/26/96
	6,041,263	03/21/00	Boston et al.			10/01/97
	6,077,412	06/20/00	Ting et al.			10/30/98
	6,271,670	08/07/01	Caffey			02/08/99
	6,400,162	06/04/02	Mallory et al.			07/21/00
	US 2002/0077031	06/20/02	Johansson et al.			07/06/01
	6,442,496	08/27/02	Pasadyn et al.			08/08/00
	6,563,308	05/13/03	Nagano et al.			03/27/01
	6,587,744	07/01/03	Stoddard et al.			06/20/00
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation
<i>CKJ</i>	WO 01/11679	02/15/01	WIPO			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>CKJ</i>	WO 01/080306	10/25/01	WIPO			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

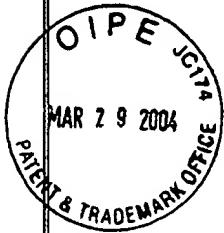
<i>CKJ</i>	Miller, G. L., D. A. H. Robinson, and J. D. Wiley. July 1976. "Contactless measurement of semiconductor conductivity by radio frequency-free-carrier power absorption." <i>Rev. Sci. Instrum.</i> , Volume 47, No. 7. pp. 799 – 805.
<i>CKJ</i>	1999. "Contactless Bulk Resistivity/Sheet Resistance Measurement and Mapping Systems." <a href="http://www.Leighton.com/fabtech1/index.html">www.Leighton.com/fabtech1/index.html</a> .
<i>CKJ</i>	2000. "Microsense II Capacitance Gaging System." <a href="http://www.adetech.com">www.adetech.com</a> .

EXAMINER	DATE CONSIDERED
<i>Indee C. Stevens</i>	02-25-05

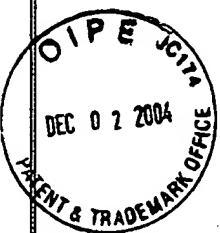
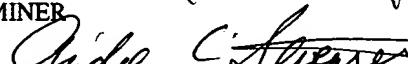
EXAMINER: Initial if reference considered; whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  <div style="text-align: center;">(PTO-1449)</div> <div style="text-align: center; margin-top: 10px;">    <b>MAR 29 2004</b> </div>		<b>ATTY. DOCKET NO.</b> 006301 USA/Consilium/Consilium	<b>SERIAL NO.</b> 09/928,474				
<b>APPLICANT</b> Badri N. KRISHNAMURTHY et al.							
<b>FILING DATE</b> August 14, 2001		<b>GROUP</b> 2812					
<b>FOREIGN PATENT DOCUMENTS</b>							
<b>EXAMINER'S INITIALS</b>  <i>RL</i>	<b>PATENT NO.</b>	<b>DATE</b>	<b>COUNTRY</b>	<b>CLASS</b>	<b>SUBCLASS</b>	<b>Translation</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	0 397 924 A1	11/22/90	Europe				
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
Rocha, Joao and Carlos Ramos. September 12, 1994. "Task Planning for Flexible and Agile Manufacturing Systems." <i>Intelligent Robots and Systems '94. Advanced Robotic Systems and the Real World, IROS '94. Proceedings of the IEEE/RSJ/GI International Conference on Munich, Germany 12-16 Sept. 1994.</i> New York, New York: IEEE. pp. 105-112.							
March 15, 2002. Office Action for U.S. Serial No. 09/469,227, filed December 22, 1999.							
March 29, 2002. Office Action for U.S. Serial No. 09/363,966, filed July 29, 1999.							
June 20, 2002. Office Action for U.S. Serial No. 09/619,044, filed July 19, 2000.							
September 26, 2002. Office Action for U.S. Serial No. 09/637,620, filed August 11, 2000.							
October 23, 2002. Office Action for U.S. Serial No. 09/469,227, filed December 22, 1999.							
December 17, 2002. Office Action for U.S. Serial No. 09/363,966, filed July 29, 1999.							
February 10, 2003. Office Action for U.S. Serial No. 09/619,044, filed July 19, 2000.							
May 8, 2003. Office Action for U.S. Serial No. 09/637,620, filed August 11, 2000.							
June 18, 2003. Office Action for U.S. Serial No. 09/655,542, filed September 6, 2000.							
August 8, 2003. International Search Report for PCT/US03/08513.							
August 25, 2003. Office Action for U.S. Serial No. 10/100,184, filed March 19, 2002.							
November 5, 2003. Office Action for U.S. Serial No. 10/172,977, filed June 18, 2002.							
December 1, 2003. Office Action for U.S. Serial No. 10/173,108, filed June 18, 2002.							
December 11, 2003. Office Action for U.S. Serial No. 09/943,383, filed August 31, 2001.							
December 16, 2003. International Search Report for PCT/US03/23964.							
January 20, 2004. Office Action for U.S. Serial No. 09/927,444, filed August 13, 2001.							
January 23, 2004. International Search Report for PCT/US02/24860.							
February 2, 2004. Office Action for U.S. Serial No. 09/363,966, filed July 29, 1999.							
<b>EXAMINER</b>  <i>RL</i>				<b>DATE CONSIDERED</b>  <i>RL</i>			

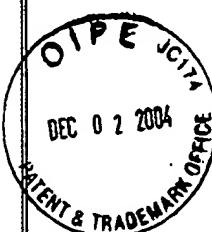
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		APPLICANT Badri N. KRISHNAMURTHY et al.			
		FILING DATE August 14, 2001		GROUP 2812	
<b>U.S. PATENT DOCUMENTS</b>					
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS
<i>CKL</i>	4,901,218	02/13/90	Cornwell		03/04/88
	5,427,878	06/27/95	Corliss		05/16/94
	5,761,065	06/02/98	Kittler et al.		03/30/95
	5,862,054	01/19/99	Li		02/20/97
	5,912,678	06/15/99	Saxena et al.		04/14/97
	5,926,690	07/20/99	Toprac et al.		05/28/97
	6,074,443	06/13/00	Venkatesh et al.		01/29/98
	6,111,634	08/29/00	Pecen et al.		05/28/97
	6,150,664	11/21/00	Su		06/29/99
	6,245,581 B1	06/12/01	Bonser et al.		04/19/00
	2001/0044667 A1	11/22/01	Nakano et al.		05/16/01
	6,346,426 B1	02/12/02	Toprac et al.		11/17/00
	6,363,294 B1	03/26/02	Coronel et al.		12/29/98
	6,442,496 B1	08/27/02	Pasadyn et al.		08/08/00
	6,486,492 B1	11/26/02	Su		11/20/00
	6,492,281 B1	12/10/02	Song et al.		09/22/00
	6,540,591 B1	04/01/03	Pasadyn et al.		04/18/01
	6,560,504 B1	05/06/03	Goodwin et al.		09/29/99
	6,590,179 B2	07/08/03	Tanaka et al.		02/26/01
	6,604,012 B1	08/05/03	Cho et al.		08/23/00
	6,618,692 B2	09/09/03	Takahashi et al.		02/26/01
	6,625,497 B2	09/23/03	Fairbairn et al.		07/10/01
	6,640,151 B1	10/28/03	Somekh et al.		12/22/99
EXAMINER <i>Chase</i>		DATE CONSIDERED <i>02-25-05</i>			

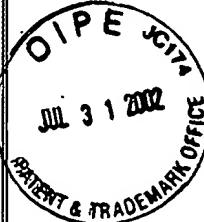
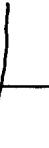
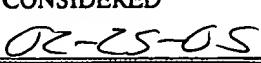
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 <p>DEC 02 2004</p> <p>APPLICANT Badri N. KRISHNAMURTHY et al.</p>			
<b>FILING DATE</b> August 14, 2001		<b>GROUP</b> 2812	
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b> <p><i>CR</i> November 17, 2004. Written Opinion for PCT Serial No. PCT/US01/27407.</p> <p>REDACTED</p>			
<b>EXAMINER</b> 		<b>DATE CONSIDERED</b> <i>02-25-05</i>	

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		APPLICANT Badri N. KRISHNAMURTHY et al.					
		FILING DATE August 14, 2001		GROUP 2812			
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS		
<i>AGS</i>	4,974,543	12/04/90	Jansen		02/28/86		
	5,621,241	04/15/97	Jain		06/07/95		
	5,660,895	08/26/97	Lee et al.		04/24/96		
	5,874,345	02/23/99	Coronel et al.		11/18/96		
	5,937,323	08/10/99	Orczyk et al.		06/03/97		
	6,201,208 B1	03/13/01	Wendt et al.		11/04/99		
	6,217,658 B1	04/17/01	Orczyk et al.		06/09/99		
	6,232,236 B1	05/15/01	Shan et al.		08/03/99		
	6,373,033 B1	04/16/02	Waard et al.		06/27/00		
<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No
<i>AGS</i>	WO 01/01205 A2	01/04/01	WIPO			X	
<i>AGS</i>	GB 2 363 477 A	12/19/01	United Kingdom			X	
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
<i>AGS</i>	Rauf, Shahid and Mark J. Kushner. August 1998. "Virtual Plasma Equipment Model: A Tool for Investigating Feedback Control in Plasma Processing Equipment." <i>IEEE Transactions on Semiconductor Manufacturing</i> . Vol. 11, No. 3. pp. 486-494.						
	Rauf, Shahid and Mark J. Kushner. May/June 1999. "Controller design issues in the feedback control of radio frequency plasma processing reactors." <i>J. Vac. Sci. Technol. A</i> . Vol. 17, No. 3. pp. 704-712.						
	Cruden, Brett et al. "Chemical Vapor Deposition (CVD) of Teflon & trade-like Films for Use in Low-k Interlayer Dielectric Applications." <a href="http://plasma-processing.com/chemvap">http://plasma-processing.com/chemvap</a> .						
	Kim, Jiyoun et al. "Gradient and Radial Uniformity Control of a CMP Process Utilizing a Pre-and Post-Measurement Strategy." <i>University of Michigan, Electrical Engineering and Computer Science Department</i> .						
	November 11, 2004. International Search Report for PCT Serial No. PCT/US03/36501.						
EXAMINER			DATE CONSIDERED				

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<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  (PTO-1449)		ATTY. DOCKET NO. 6301/Consilium/DV		SERIAL NO. 09/928,474		
		APPLICANT Badri N. KRISHNAMURTHY et al.				
		FILING DATE August 14, 2001		GROUP 2171		
<b>U.S. PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
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<b>FOREIGN PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT/ PUBLICATION NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation
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<del>XXXXXXXXXX</del>						<del>XXXXXXXXXX</del>
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>						
	Boning, Duane, William Moyne, Taber Smith, James Moyne, Roland Telfeyan, Arnon Hurwitz, Scott Shellman, and John Taylor. October 1996. "Run by Run Control of Chemical-Mechanical Polishing." <i>IEEE Trans. CPMT (C)</i> , Vol. 19, No. 4, pp. 307-314.					
	Edgar, Thomas F., Stephanie W. Butler, Jarrett Campbell, Carlos Pfeiffer, Chris Bode, Sung Bo Hwang, and K.S. Balakrishnan. May 1998. "Automatic Control in Microelectronics Manufacturing: Practices, Challenges, and Possibilities." <i>Automatica</i> , Vol. 36, pp. 1567-1603, 2000.					
	Chemali, Chadi El, James Moyne, Kareemullah Khan, Rock Nadeau, Paul Smith, John Colt, Jonathan Chapple-Sokol, and Tarun Parikh. November 1998. "Multizone Uniformity Control of a CMP Process Utilizing a Pre and Post-Measurement Strategy." Seattle, Washington: SEMETECH Symposium.					
	Moyn, James. October 1999. "Advancements in CMP Process Automation and Control." Hawaii: (Invited paper and presentation to) Third International Symposium on Chemical Mechanical Polishing in IC Device Manufacturing: 196 <sup>th</sup> Meeting of the Electrochemical Society.					
	Lee, Brian, Duane S. Boning, Winthrop Baylies, Noel Poduje, Pat Hester, Yong Xia, John Valley, Chris Koliopoulos, Dale Hetherington, HongJiang Sun, and Michael Lacy. April 2001. "Wafer Nanotopography Effects on CMP: Experimental Validation of Modeling Methods." San Francisco, California: Materials Research Society Spring Meeting.					
	NovaScan 2020. February 2002. "Superior Integrated Process Control for Emerging CMP High-End Applications."					
EXAMINER 			DATE CONSIDERED 			

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